## Floodplain and Drainage Advisory Committee

## **November 30, 2011 Meeting Notes**

Committee Chair Frank Piorko began the presentation by welcoming all. Each Committee member as well as DNREC employees and its contractor introduced themselves. Committee members present were: Kyle Sonnenberg, Barry Benton, Sarah Keifer, Henry Chau, Michelle Harel, Richard Sobota, Ron Hunsicker, Fred Mott, David Carlson, Michael Harris, Rich Collins, Vince D'Anna, Mike Riemann, John Garcia, and Lorilee Harrison (for Gene Read). Mike Powell, Greg Williams, Brooks Cahall, Bob Enright, Matt Grabowski, Jim Sullivan, and Marcia Cagle represented DNREC and David Athey and Gina Tonn represented DNREC's contractor Duffield Associates. Guests included George Haggerty, Jared Adkins, Kevin Donnelly, and Jessica Watson.

Mr. Piorko summarized the October 27, 2011, meeting and specifically described again the Senate Bill 64 process. Mr. Cahall reviewed floodplain and drainage terms and concepts and noted that representatives from all three conservation districts were present at the meeting due to their work on drainage issues.

Mr. Cahall presented a case study for the first of four top drainage issues in Delaware; disruption of existing drainage patterns, wherein a drainage ditch constructed on a property by an adjacent property owner was filled in by a subsequent property owner. Mr. Collins asked if the property owner got permission to build the ditch on the adjacent property. Mr. Cahall indicated that permission was given, but no permanent easement was obtained. Mr. Piorko noted that there are regulations that prohibit blocking a jurisdictional waterway, but not a non-jurisdictional ditch. Mr. Mott said that the property owner should have gotten an easement in this case. Mr. Collins asked if the concern over the ditch was that the horses on the property might break a leg in the ditch, and Mr. Cahall indicated that that was the case.

Mr. Piorko explained that DNREC often spends money on drainage improvements without a permanent easement. Many feel that if public dollars are spent, DNREC should get a permanent easement. However, sometimes it is hard to get landowners to volunteer to let DNREC make improvements. It is even harder to get them to sign off on an easement.

Mr. Collins noted that in the case study, if there was a regulation prohibiting the filling of the drainage ditch, the landowner could have been negatively impacted. The property may have not sold to the new owner who wanted to have horses on the property. Mr. Cahall noted that DNREC presented other options to the property owner besides filling in the ditch, but the property owner only wanted to fill in the ditch. Mr. Grabowski stated that there was a debate over who would pay for the project.

Mr. Riemann said he thought there were code provisions in place in New Castle and Kent counties regarding situations such as this. Mr. Piorko responded that codes vary between

municipalities and drainage is handled in various parts. There are still many places where a neighbor can fill in a ditch or place a shed where it blocks drainage. There are often no restrictions and the only remedy is in the court system.

Mr. Haggerty stated that local remedies are designed around growth; not to fix legacy problems. He thinks that residents want a government answer and don't want to deal with the courts. Houses could be designed differently and until water is treated as a component of infrastructure (like roads), these issues will remain.

Mr. Piorko asked how New Castle County would respond if someone puts a shed in a swale. Mr. Haggerty said that the response would be that that is a civil matter to be discussed in court. The County may send a code enforcement officer to investigate and the response would partially depend on whether there is an easement. In the past many developers constructed swales but didn't include easements.

Mr. Piorko asked if any municipalities have legal authority without easements. Mayor Hunsicker replied that they have some general language in their charter but don't like to use it because it could be challenged.

Mr. Collins said that this is a natural conflict and that he felt the group is leaning towards favoring the regulatory side but there is a balance. Mr. Piorko said that lots of people don't like the "court" answer, but maybe that's what the answer should be. Mayor Hunsicker said that government shouldn't be the arbiter and that the rightful place is in the courts. Mr. Haggerty noted that people can't be stopped from calling their elected officials about these matters.

Mr. Collins said that the courts can look case by case at situations and make decisions based on facts. Regulations can't be case by case and can have a serious impact on the economy over time. He felt there is a bias toward one type of solution.

Mr. Sonnenberg asked if state law allows property owners to change drainage patterns such as moving a drainage exit point from the front to the back of a property. He recalled in North Carolina, a property owner could alter drainage on his or her property but couldn't change the exit point onto another property. Mr. Piorko replied that there is nothing in State law that restricts changing the drainage exit point. Mr. Cahall added that because most of Delaware is so flat, sometimes there aren't really defined natural drainage patterns.

Mr. Carlson asked what the codes say about new facilities and if they are made to consider drainage. Mr. Haggerty said that in New Castle County, a lines and grades submittal is required for anything over 480 square feet. The code was recently updated to deal with infill issues. Mr. Carlson said that there should be mechanisms to ensure new structures are built with adequate conveyance. Mr. Piorko said that it depends on the level and size. There is language in the tax ditch law that gives legal authority from restricting drainage in a tax ditch. Sometimes obstructions are built in a tax ditch right of way.

Mr. Cahall presented a case study for the second of four top drainage issues in Delaware; inadequate lot grading. Mr. Collins asked how the problem could be resolved with grading. Mr. Cahall replied that the house could have been raised with two courses of block. This would have allowed the owner to elevate the HVAC system.

Mr. Collins said that he understands that there is a human concern but that the house was built in a ridiculous place. After two major incidents, the property owner should have been told to jack the house up. Mr. Piorko replied that that's a great point. Should whoever issued the building permit have a responsibility to make a recommendation about height? Mr. Collins replied that maybe they should hand out information. He believes if an ordinance is made, there is a possibility for higher expenditures being required of home owners. Mr. Piorko said that there are various levels of requirements and that middle ground needs to be found.

Mr. Garcia said that there is no easy answer. A guide regarding finished floor elevations may have helped in this case, or it may not have, but additional expenses could put some house buyers out of the market. He doesn't know if in New Castle County they could have shown adequate conveyance in this case. Mr. Piorko replied that the Committee should be looking at what is reasonable to impose.

Mr. Riemann noted that the storm in question was greater than a 100-year event and asked at what point do you stop? Elevating the house to a 100-year flood elevation might not have been enough. Mr. Cahall said that the conversation is less about storm events as it is getting water away from the house.

Mr. Riemann said that there could be a lot of cost required to do a study. Mr. Enright noted that in this case they should have looked at the difference in elevation between the house and the road. Mr. Cahall said that this is really a homeowner issue and that DNREC spends a lot of time on these types of problems.

Mr. Athey asked if DNREC could clarify when they would get involved in such an issue and when they wouldn't. Mr. Cahall replied that DNREC goes to look at all complaints. They will make recommendations for landowners to fix on their own if possible. Complaints in general become a project when the fix would benefit more than one property.

Mr. Mott said that it would be much easier if the knowledge in this room was brought in before construction. For the Fox Hall project, the conservation district looked at the site first and made warnings which were ignored, and then the homes flooded.

Mr. Cahall presented a case study for the third of four top drainage issues in Delaware; adverse lot grading, where newer properties were elevated with fill around an existing property at a lower grade resulting in drainage problems on the lower property.

Mr. Collins noted that the case study involved an older development. Mr. Cahall affirmed that an older development was described but that new fill has been placed within the last two to three years on properties which have changed hands. The properties were elevated with fill by the community. Mr. Piorko said that often this filling is done to meet FEMA requirements, but that the requirements could also be met without fill. The discussion is one property owner building to the detriment of another.

Mr. Collins asked about legislation passed two to three years ago about mobile home communities. Mr. Piorko responded that it didn't address conveyance. Mr. Collins said that in one instance he created a standing water problem near his own driveway and if the government regulates these types of small problems it will open the door to addressing more problems.

Mr. D'Anna said that lines and grades approval as is required in New Castle County is needed in Kent and Sussex Counties or there is no hope in fixing this type of problem. He believes there is something fundamentally wrong if severe flooding is happening in neighborhoods. Ms. Watson said that there is no consistency with requiring first floor elevations on plans and problems exist without them. Mr. D'Anna said that good drainage planning is needed.

Ms. Watson said that the Sussex Conservation District is often asked to fix problems on lots in developments where roads and infrastructure have already been placed. She noted it would be much less expensive if these issues were addressed initially. Mr. Piorko indicated that there are community-level versus lot-level issues and asked how can it be assured that something will work. Options include lines and grades submittals and spot grades submittals. Mr. D'Anna recommended that New Castle County be looked at since the drainage works there.

Mr. Haggerty said New Castle County's approach seeks to prevent problems if possible before they occur. The County is now requiring grading plan as-builts which he feels has been fairly well received. Mr. Garcia concurred. Mr. Harris questioned the process for a single lot versus a subdivision. Mr. Garcia noted lines and grades plans typically do not include off site areas.

Mr. Collins said that everyone is still reacting to the housing boom. He thinks future buyers will be more discriminating when they get back in the market and a lot of issues with new housing will diminish. People will be looking for more quality.

Mr. Piorko said that in the 1990s there were many of communities designed with 15-20 houses. Then land development changed with large residential homebuilders doing 150-200 lot developments. He said it is often easier to manage larger than smaller subdivisions and he thinks a way to manage grades for 15-20 lot subdivisions with 4-5 different builders is needed. Mr. Cahall said that as developments take longer to build, conveyance still needs to be considered.

Mr. Riemann said that in New Castle County, sediment and stormwater, lines and grades, and bulk grading are all included in plan submittals. In Kent, finish floor elevations are included, but no lines and grades. In Sussex, finish floor elevations and lines and grades are not required. Often engineers don't know the details about the types of houses being proposed when they are preparing plans and can't always put the finish floors on the plans. Also, easement requirements vary by municipality.

Mr. Cahall presented a case study for the fourth of four top drainage issues in Delaware; the need for adequate conveyance with easements.

Mr. Riemann said that Dover requires 8 foot easements. Ms. Keifer added that in Kent County it is typical to include 10 foot easements. Mr. Cahall noted that easements are sometimes put on record plans but it is unclear who the responsible parties are. Mr. Piorko said that the state sediment and stormwater regulations can't require an easement as part of the permitting process. DNREC does not have the legal authority as this would be considered a taking.

Mr. Grabowski asked who has responsibility for activities in the easements. Mr. Piorko responded that this will need to be identified and the line between public and private responsibilities is not well defined. Regarding DelDOT, the responsibility for activities in easements seems to depend on the county and is not set in stone.

Mr. D'Anna asked about problems with road front lots. Mr. Cahall responded that the example shown was a road front lot. Mr. D'Anna said that New Castle County stopped allowing these type of lots and Ms. Keifer added that Kent County also stopped allowing them. Mr. Piorko said that many road front lots have been approved but not built. Ms. Keifer said that there is no political will to rescind the lots.

Mr. Collins said that clustering is now popular with homes typically built close together. He asked what happens with pipes built in between. Mr. Haggerty said that they wouldn't put pipes between those houses now. The drainage would be done elsewhere. He said the best scenario is when a project is designed, built, and then sold by the same entity. The next best is when a project is designed and built by the same entity but sold be someone else. The worst scenario is when a project is designed, built, and sold by different entities.

Mr. Piorko said that there are some tools available for managing drainage that fall in the middle ground. Mr. D'Anna asked what would be the mechanism for enforcing minimum standards. Mr. Piorko replied that it would be part of the building permit process.

Mr. Athey presented examples of drainage and grading standards from the City of Deltona, Florida as well as excerpts from various codes from Delaware counties and municipalities.

Mr. D'Anna asked how a model ordinance would be implemented. Mr. Piorko said that a town could require a sketch plan or spot grades. Mr. Athey said that's part of the process the Committee is working on. Mr. Piorko explained that all municipalities will review the recommended standards and bring comments back to the group. The final draft report will go to the general assembly.

Mr. Collins said that there are vastly different conditions throughout the state with many communities. He believes one rule for everybody is absurd and will drive up costs. Mr. Piorko said that providing a generic ordinance regarding no adverse impact would not be onerous. A generic recommendation can be made that doesn't impact those that don't have water issues. Mr. D'Anna said that he doesn't understand why this wouldn't work in Sussex. Mr. Piorko said that sometimes the problems are caused by those with building permits.

Mr. Powell and Mr. Cahall jointly presented a discussion about lack of real estate disclosures.

With regards to the real estate disclosure form, Mr. D'Anna said that if DNREC would get together some information on what they think should be on the form, he could set up a meeting with the attorney at the Delaware Association of Realtors. They regularly modify the form and could potentially modify it based on DNREC's request.

Mr. Chau asked if the disclosure form was a statewide form and if it was required by State law. Mr. D'Anna responded that the form is generated by the realtors association. It is a legal requirement to fill out a disclosure, but the form is not generated by the state.

Mr. Powell asked if the form applies to both developed and undeveloped lands. Mr. D'Anna said it did. Ms. Tonn asked if realtors regularly check for buyers to see if properties are within the floodplain as this would be easy to do. Mr. D'Anna replied that good realtors often do. Mr. Williams noted that realtors are not responsible for the forms. Ms. Harel said that "unknown" can remove a person's responsibility.

Mr. Powell and Mr. Cahall jointly presented a discussion about lack enforcement of existing standards.

Regarding floodplain regulations, Mr. Chau said that Maryland did a model MOU, which is a form for a community to use for another level of government to enforce their floodplain regulations. Mr. Collins said that he has a theory that more and more regulations will be developed. Looking at the data from the last meeting, he believes all FEMA claims in Delaware were paid for by premiums and therefore the program is working. Mr. Piorko said that there was plenty of room for improvement in the floodplain management program.

Ms. Harel said that not all communities are properly enforcing their ordinances. Elevation certificates are a way to make sure regulations are followed. Mr. Collins asked if there are only two communities in the state that don't have flood insurance. Mr. Powell responded that there are two communities with mapped floodplains in Delaware that do not participate in the NFIP and a couple others that don't have mapped floodplains and don't participate. Mr. Collins said that FEMA disqualifying communities that don't follow the rules should make the system work.

Mr. Chau noted that the Committee is a great idea because it is such a diverse group to discuss these issues. Other options to elevation certificates are available. Talking about the issues and looking at the procedures can improve the practice.

Mr. Powell noted that surveyors are needed during construction and said that he could check with the surveyors association to see whether or not it really costs more to do an elevation certificate also during the building process. Ms. Harel said there may be a cost up front but spending money then will save money down the road with insurance.

Mr. Collins said he wonders how many actual problems are out there. Mr. Piorko responded that almost 10% of homeowners in the state call to ask for assistance.

Mr. D'Anna asked if flood insurance premiums are the same from state to state. Mr. Sobota responded that rating is by zone, and is not specific to the state. Mr. D'Anna asked if states get rewarded for managing floodplains well. Mr. Sobota responded that they can get a rate discount for managing floodplains well. Mr. D'Anna said that better mapping could improve the program and asked if floodplain insurance is available to those not located on a stream, for instance in Seaford. Mr. Sobota replied that yes, it is available. There is a perception that the program is taking in more money than it is paying out, but that the program is developed on a 100-year cycle. One single catastrophic event could change the payout amount. FEMA can not pull out of the most problematic areas.

Mr. Collins asked if flood insurance would pay for the house previously discussed that was built in a hole. This lead to a discussion about the FEMA definition of a flood. Mr. Collins suggested that there are self-correcting features in the flood insurance program. Mr. Sobota stated that elevation certificates are not a FEMA requirement, but are required for FEMA flood insurance if a property is located in the SFHA.

Mr. Piorko closed the meeting by saying the next meeting would occur on January 27, with subsequent meetings on February 21 and March 28.